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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,291

02/26/2004

William F. Geraghty

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03/07/2006

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EXAMINER

MATTHEWS, TERRELL HOWARD

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,291	<b>Applicant(s)</b> GERAGHTY, WILLIAM F.	
	<b>Examiner</b> Terrell H. Matthews	<b>Art Unit</b> 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-21 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/26/04</u> | 6) <input type="checkbox"/> Other: ____.  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/10/2006 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- rejected under 35 U.S.C. 103(a) as being unpatentable over Barber (3362480) in view of Jamal (3024903).

Referring to claims 1-4,7. Barber discloses a "Machine for cleaning sand beaches" as claimed. See Figs. 1-7 and respective portions of the specification. Barber further discloses a wheel unit (38), a support frame mounted on said wheel unit, having means for advancing said machine along tract of ground (12), an endless conveyor mounted on said support frame, having a plurality of tines projecting from an outer side thereof and a flight extending from a front end adjacent ground level, upwardly and rearwardly to an elevated rear end (72), a receptacle mounted on said support frame,

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positioned to receive articles removed by said tines and carried upwardly and rearwardly on said conveyor and discharged into said receptacle (100) and means mounted on said support frame for driving said conveyor. Additionally, Barber discloses a draw bar (48) connected to said support frame and connectable to a prime mover. Barber does not disclose that the receptacle has a set of tines cooperable with said conveyor tines perpendicular to a bottom flight of the conveyor to dislodge articles. Jamal discloses a "Metal Cleaning Apparatus" as claimed. See Figs. 1-3 and respective portions of the specification. Jamal further discloses an endless conveyor (13) mounted on a support frame (9) as well as a receptacle (26) mounted on a support frame (9), positioned to receive articles removed by the tines and carried upwardly and rearwardly on the conveyor and discharged into the receptacle, and having a set of tines (25) mounted on a front, transverse wall thereof, cooperable with the conveyor tines (21) to dislodge articles carried by the conveyor tines. It would have been obvious to a person of ordinary skill in the art at the present time of the invention to modify the apparatus of Barber to include the teachings of Jamal and include a plurality of tines mounted on a front disposed wall of receptacle cooperable with the conveyor tines so that the receptacle tines could dislodge items transported on the conveyor tines into the receptacle to aid in the removal of debris.

Referring to claim 5-6. Barber discloses the invention as described in detail above. Barber further discloses the spring-like tine members are generally U-shaped with a pair of parallel extending legs with a transversely disposed base portion and that each leg has an offset portion terminal end portion (126) and an intermediate or coil

portion (128) (See Col. 4 l. 67-74). Additionally Barber discloses that the U-shaped portion of the tine members is positioned overlying transverse bar (74) of the conveyor (72) so that the terminal end (126) is disposed (See Col. 5 l. 1-8 & Fig. 2). It should be noted that the terminal end portion (126) is regarded as the free end. Barber does not disclose the receptacle having tines. It would have been obvious to a person of ordinary skill in the art to modify the system of Barber to include tines in the receptacle as taught by Jamal as detailed above so that heavier or stuck debris could be dislodged from the conveyor and placed in the receptacle.

Referring to claim 14-16. Barber discloses the invention as described above. Barber further discloses that receptacle (100) is pivotal and tiltable about a transverse axis as well as a fluid actuated cylinder assembly operatively interconnecting the support frame and at least one lift arm (See Col 4 l. 45-58). The movement of the receptacle (100) is further illustrated in Fig. 2.

Referring to claim 20. Barber discloses the invention as described above in detail. Barber further discloses a pair of sidewalls (22) mounted on said support frame where conveyor (120) is disposed between (See Col. 2 l. 60-66 & Fig. 2).

Referring to claim 21. Barber discloses that the angular relationship of the support frame and the drawbar may be varied to correspondingly vary the position of the tines relative to the ground (See Col. 3 l. 33-41).

Claims 10-12, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barber in view of Jamal in further view of Baxter (5133413).

Referring to claim 10-12. Barber discloses that sets of drive sprockets are operatively interconnected by multi-link chain members (68,70) which form a supporting component for bar flight conveyor (72) covered with a laminated rubber covered belting material (76) and that the bar flight conveyor is formed of a plurality of uniformly spaced channel shaped cross bars (74). It can be seen from Fig. 2 that the conveyor includes a flight at a lower, front end thereof, spaced and disposed substantially parallel to ground level. Barber does not disclose that the conveyor is perforated to allow ground particles deposited on said conveyor to gravity fall there through or that the conveyor is of a chain link construction. Jamal does not disclose that the conveyor is perforated to allow ground particles deposited on said conveyor to gravity fall there through or that the conveyor is of a chain link construction. Baxter discloses the invention as described in detail above. Baxter discloses a "Beach cleaning apparatus" as claimed. See Figs. 1-4 and respective portions of the specification. Baxter discloses a conveyor (3) with tines (4,5) that is perforated to allow ground particles deposited on conveyor to gravity fall. Additionally, Baxter discloses that the conveyor belt is a mesh screen material (See Col. 5 l. 9-12) and that other perforated materials could be used that allow for sand and water to easily drip (See Col. 2 l. 37-40). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Barber to include a chain link construction conveyor that was perforated so that water, sand, and other loose particles could drip down.

Referring to claim 19. Barber discloses the invention as described above. Barber does not disclose that the conveyor driving means includes a hydraulic motor. Jamal

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discloses the invention as described above in detail. Jamal does not disclose a conveyor driving means including a hydraulic motor. Baxter discloses the invention as described above. Baxter discloses as numeral (25) in Fig. 1 that there are means for driving the conveyor. It would have been obvious to a person of ordinary skill in the art to include a hydraulic motor as the means to drive the conveyor because they are sufficient at low speeds but provide a good amount of torque so that the conveyor could advance an arrangement of items.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barber in view of Jamal in further view of Jackson (4608725).

Referring to claim 13. Barber discloses invention as described above. Barber does not disclose at least one idler wheel mounted on the support frame and operatively engaging an underside flight of the conveyor. Jamal discloses the invention as described above in detail. Jamal does not disclose at least one idler wheel mounted on the support frame and operatively engaging an underside flight of the conveyor. Jackson discloses a litter-retrieving machine as claimed. See Figs. 1-14 and respective portions of the specification. Jackson further discloses a conveyor means (5), a framework wheel (29), and idler wheel (160), and a swing-able arm assembly (161). It can be understood from Fig. 2 that idler wheel (160) is mounted on the arm assembly (161) which is connected to frame (13). Additionally it should be noted that idler wheel (160) could be operatively engaged with the underside flight of the conveyor (5). It would have been obvious to a person of ordinary skill in the art to include the idler wheel

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of Jackson to the apparatus of Baxter to help drive the conveyor so that articles could be moved into the trough (10).

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barber in view Jamal and in further view of Fry (2976936).

Referring to claims 17-18. Barber discloses the invention as described in detail above. Barber does not disclose a receptacle with tines or a shaft joined into a support frame having a sprocket with a radially disposed arm, a pair of trunnions mounted on side walls, one sprocket mounted on the trunnions, an endless chain around the sprockets, a fluid actuated cylinder assembly interconnecting the support frame, or the radially disposed arm operative to pivot and tilt the receptacle. Jamal discloses the invention as described above. Jamal does not disclose a shaft joined into a support frame having a sprocket with a radially disposed arm, a pair of trunnions mounted on side walls, one sprocket mounted on the trunnions, an endless chain around the sprockets, a fluid actuated cylinder assembly interconnecting the support frame, or the radially disposed arm operative to pivot and tilt the receptacle. Fry discloses a vehicle for cleaning beach sands as claimed. See Figs. and respective portions of the specification. Fry discloses a shaft (16) connected into the support frame (10) having a sprocket (57), with a radially disposed arm (48), a pair of trunnions (59), an endless chain (56), and a fluid actuated cylinder assembly (50) interconnecting the support frame which allows the receptacle (44) to be tilted and pivoted. It would have been obvious to modify the apparatus of Barber to include the teachings of Jamal and Fry so



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that the receptacle with tines could dislodge articles from the conveyor into the receptacle which would be able to tilt and pivot more easily allowing it to be better suited to dump out debris in a variety of containers.

### ***Allowable Subject Matter***

Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. More specifically, claim 9 is rejected as being dependent upon rejected base claim 1.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

THM

A handwritten signature in black ink that reads "Kathy Matecki". The signature is written in a cursive, flowing style.

**KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600**